



Factors of Failure in Innovative Business Activities in Sanandaj

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ABSTRACT

The aim of this study was to analyze the reasons affecting the failure of innovative business activities in Sanandaj. The population of this research consisted of 150 managers and experts who did not have innovation in their businesses or had some kind of unsuccessful experience in this field. Mostly, the activities of these businesses were in the field of metal industry, packaging, textile, wood and automotive downstream industries. Among this population a sample of 105 people were chosen by using simple random sampling method. The aim of this study is functional and the data collection was descriptive and correlational. The main tools for collecting data were library resources and standard innovation failure factors questionnaire Wyckoff, and innovation questionnaire, on the basis of Likert scale. Data obtained from the questionnaire were analyzed by using descriptive statistics (mean, percentage, and standard deviation), inferential statistics (Pearson correlation and Structural Equation Modeling (SEM)) and SPSS and AMOS software. Results of the conducted analysis showed that all six factors are effective in the failure of innovative business activities in the city of Sanandaj. The results of Structural Equation Modeling indicated that poor management is more effective than other factors in the failure of activities.

Keywords: Innovation; failure of innovative business activities; factors of innovative activity failure

1. INTRODUCTION

Changes in products and market mechanisms are often in a way that organizations seek to take advantage of opportunities that other organizations do not seize and even sometimes are not aware of their existence. In this context, innovation plays a fundamental and guiding role (Collins & Ram, 2003). Today innovative-based activities are not only, part of organizations' strategies but they have also turned into the mission and philosophy of organizations. Innovation affects businesses and business contexts directly. In such context, innovation is done when the business is able to identify the needs and take them in the design of new products and services defined by the appropriate technology business. Thus, a new business, a new product or service or a new process in producing a product or providing a service, can be considered as the result of the innovation process, in which the combination of new factors are used to produce new products and services (Garrido et al, 2008). On one hand, increased innovation leads to increased production by improving the productivity of businesses and ultimately results in economic prosperity, in a way that inter-organizational entrepreneurship determines the direction of the organizations and subsequently, innovation activities promote productivity rate and business production. On the other hand, in a steady state, increased production due to innovation will bring about increased gross domestic production (GDP) and economic growth (Falatoon & Safarzadeh, 2006). In addition to the economic consequences and changes in technology, innovations may also have different effects in other areas of social, cultural, environmental and even political areas. Typically, more multipurpose technologies have more diverse effects (Garrido et al, 2008).

Generally, innovations affect individuals and organizations and subsequently, individuals and organizations also affect contexts. The path of economic boom in developing countries passes innovation. Nowadays, innovation counts as a fundamental principle that leads to the survival of businesses in competitive markets, so that in the study of businesses in Sanandaj it was revealed that in recent years about 80% of businesses of this city are inactive. This might be due to different reasons; one of which is that manufacturers do not create a competitive advantage with their competitors; and naturally, lack of innovation in manufactured products is considered as one of the effective factors in the context of developing competitive advantage.

On the other hand, amorphous and highly complex picture of the causes and effects in developing countries, especially our country, Iran, has highlighted the lack of cognitive, economic, organizational aspects in business innovation processes. One important point to be mentioned in this regard is that no widespread study has been done about the factors that cause lack of tendency to innovation and failure in innovative activities. Accordingly, especially in the area of business activities in Sanandaj, there are many factors that need research and focused study. For example, factors such as culture, resources required for innovation, innovation management systems and indicators of measuring progress in different stages of innovation (especially in the utilizing and penetration stages) in businesses are examples of some of these factors that are barriers to innovation in Iran and consequently in Sanandaj (Fakoor and Ansari, 2009), though, they have not been considered enough.

Therefore, focusing on such issues in related research can be an effective starting point for the study of innovation in Iran and especially in the Sanandaj city. Businesses often fail in the field of implementing innovation activities. This failure can be caused by many factors. Therefore, in this study we will attempt to review the concepts and literature related to the

concept of innovation, and to identify and prioritize the factors that cause failure in innovative business activities in Sanandaj.

2. REVIEW OF LITERATURE

Khodaparasti (2012) in a study investigated the causes of failure of innovation in small and medium enterprises in Zahedan. The aim of this study was to investigate the causes and influential factors on the success and failure of innovative activities of small and medium businesses in two industrial town of Zahedan. To this end, the existing literature and texts on the innovation were investigated and ten factors were described as influential factors on failure and innovation. In the field research section, the factors affecting the failure of innovative activities in the aforesaid companies were investigated. Analysis of the completed questionnaires by the directors of these companies -through structural equation modeling - showed that all ten proposed factors, has contributed to the failure of innovative activities of these companies, and at the end, by using path coefficients obtained from the structural equation, the barriers to innovative activities has been ranked. In this ranking, not devoting enough time and energy to removing uncertainties in the process of organizational innovation has been the most important factors in the failure of innovation in small and medium-sized businesses in Zahedan. Jolodar (2011) examined the reasons and signs of failure of small and medium enterprises. Based on the analysis of data they concluded that the failure of a business can be a result of various factors of inside or outside areas of the organization.

Failure to determine one or two reasons suggest that entrepreneurs should note that many factors will occur simultaneously and will affect a company's life. One other point that is gained from the investigation of business failure reasons is that factors associated with the owner or manager of the company are the most influential factors in determining the failure of small and medium enterprises. Asadollahi and Dashti (2010) used management theories to examine the success and failure factors of innovation. In this study, factors of developing innovation in organizations were studied by using various management theories. To this end, the positive and negative factors of each management theories, such as system theory, learner organization and chaos were analyzed. Then, the effect of each of these theories in the production of ideas, and fostering the staff's ingenuity, particularly their creativity and innovation is elaborated.

The studies show that to develop innovation in an organization, in addition to having creative staffs and executives, the existence of structure, strategy, environment, technology, size and organization life cycle, the power of controlling human resources, culture and attitude and management style also can trigger innovation and cause innovation in the organizations. In their study, Mohammadghasemi and Zivdar (2010) analyzed the factors leading to failure of innovation activities in small and medium-sized businesses in Tehran. The results of analysis conducted on the views of sample senior business managers that lacked innovation or had unsuccessful experience in innovation activities, confirmed the significant impact of nine factors of the proposed factors. The ranking of significant factors shows that the absence of inadequacy of the three factors of culture, resources, and ideas management system play the most prominent role in the absence of approach to innovation activities or the failure of innovative activities.

Arasti & Gholami (2010) in a study identified the failure factors of entrepreneurs in Iran. based on the results of the study, the main causes of failure of entrepreneurs in Iran include three internal factors: "lack of sufficient motivation and tiredness and disillusionment of work ", " unrealistic Evaluation of plans "and" lack of membership in networks and groups associated with the business" and three external factors "difficult economic climate of society ", " laws and regulations incompatible with entrepreneurial activities "and" an insufficient supply of financial resources by investors and Banks". In another study Fakkor and Ansari (2009) investigated the inhibiting and motivating factors of innovation in Iran's small chosen enterprises. The research data of this study were collected by selecting 40 companies in the machinery and equipment group of industry exhibition in Tehran in 2005, and by utilizing the library studies for the development of theoretical basis of the research and doing interviews with the authorities of selected companies.

The results showed that the response to the needs of customers and markets and increasing competition in the specifications of market products are the first and second priority in motivational factors of innovation in the studied companies and lack of access to the required financial resources have been the most important obstacles to innovation in the companies. Vega and Lopez (2010) investigated the abandonment of innovative activities by providing evidence from Spanish companies. The results show that factors related to market are the most important failure factors of innovation. By analyzing the results of company size we find that competition in the market and uncertainty are the main reasons of the abandonment of innovative projects in small and medium-sized enterprises, in contrast, for large companies, the most important barriers are lack of qualified personnel and the availability of external financial resources.

European Federation of Accountants (FEE) in a survey about the failure of small and medium businesses, have divided factors of these business failures into two categories: internal and external.

Internal factors include: poor management, budget deficit, poor management of cash flow, inadequate financial resources, dependence on customers or suppliers, bad (uncollectable) debt, trades more than the financial ability or the market demand, poor market study, deception and fraud. External factors that are not easily predictable and include unusual occurrences that happen in a region or country where the business is active, and classified as follows: Changes of purchase patterns, reducing the purchasing power of customers or a group of customers, raw material shortages, strikes of customers, supplying products at lower prices than the competitors, substitute products, unpredictable disasters, government regulation and international actions, environmental protection and other legal requirements, customer's or the main supplier's bankruptcy (FEE, 2004). A study entitled "Innovation in 2003, experiences and priorities of European managers", was conducted at the request of European Commission in 15 European Union member countries. In this study barriers to innovation in small and medium sized firms of these countries were considered as follows: 1. Not encountering customers or markets seeking innovation, (2) lack of access to new technologies, (3) lack of access to required financial resources; 4. Lack of access to human resources and required expert; 5. lack of access to counseling services in the required fields; 6. lack of adequate protection of technical knowledge of the Company; 7. lack of networking with companies and universities.

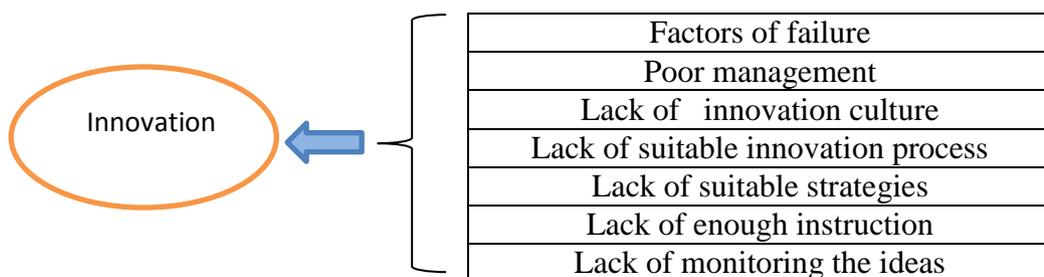
Mc Adam (2004) in their research examined the barriers to innovation in small businesses that are located in deprived areas. In their opinion, in these areas the required

environmental infrastructure for innovation is usually less developed than central districts. In addition, market and skills access are also more difficult. Oregon (2006) have referred to the organizational culture, leadership and strategic planning as incentives to innovation in their study. Small and medium-sized firms are increasingly trying to gain competitive advantage in their strategic planning. Research studies show that small firms that have benefited from strategy have better performance than firms lacking strategy. These firms have more potential for growth, development and innovation and delivering new products to the market. Liao et al (2014) in a study investigated the rights of stockholders of brand equity and assessed factors aggravating the failure of product innovations. This study evaluated how consumers view brands and assessed brands that have failed innovations. Results show that top brands which have higher share suffer more than other brands from side effects of failure in innovation.

Larsen and Clute (1979) also in their experimental research on owners of failed businesses identified eight individual characteristics among these subjects. These individual characteristics include: optimism about personal skills in business, limited formal education, lack of flexibility and innovation, use of tastes and personal opinions as standards of work, decision making based on evidence and emotions and erratic and aimless factors, spending time in the past and having no inclination towards future, , limited studies in the literature related to the business, resistance in consulting appropriate resources and accepting advice from the wrong people instead. They also described "9 poor management" in the failed businesses, including failure to identify the target market or customers, failure to determine the commercial area, failure in assigned tasks, the belief that advertising is just expense not investment, imperfect knowledge of the pricing strategy, inadequate understanding of distribution channels, lack of planning, failing to motivate, the belief that problems are because of others' mistakes and loan solves all the problems described in the failed businesses.

3. CONCEPTUAL MODEL

In this study, several theoretical models and patterns of independent and dependent variables were available, which were reviewed comprehensively and in detail in the literature review of the study. In the assessment and selection of basic models of the research, it was tried to select a model that matches and is more consistent with the existing conditions and characteristics of population. Finally, with regard to what was explained, the model was developed based on the research literature done in and out of the country. In order to assess factors of failure in this study Wyckoff research (2004), (Mohammad Ghasemi and Zivdar, 1388)- which assesses factors of failure in six dimensions- is used.



4. CONCEPTUAL MODEL OF THE RESEARCH

Research Hypotheses

Poor management is effective in the failure of innovative business activities in Sanandaj. Lack of appropriate innovation culture is effective the failure of innovative business activities in Sanandaj. Lack of a broad and inclusive process is effective in the failure of innovative business activities in Sanandaj. Lack of communication between projects and innovative designs with the business strategy of Sanandaj is effective in the breakdown of business innovation activities. Lack of competent trainers and managers in innovative teams is effective in the failure of innovative business activities in Sanandaj. The lack of an effective system for managing innovative ideas is effective in the failure of innovative business activities in Sanandaj.

5. RESEARCH METHODOLOGY

This research was practical and descriptive-correlational. It is practical because the expected results can be applied to improve the innovative performances. Given that this research is about the business of Sanandaj, the population of the study consisted of 150 small and medium-sized business experts and managers of Sanandaj who did not have innovation or somehow have had unsuccessful experience in this field. Mostly, the activities of these businesses were in the field of metal industry, packaging, textile, wood and automotive downstream industries. The sample was selected based on the following formula:

$$n = \frac{150 * 1/96^2 * 0/5 * 0/5}{0/05^2 (150 - 1) + 1/96^2 * 0/5 (1 - 0/5)} = 105$$

The main tool for gathering data was questionnaire. Accordingly, to evaluate the variables, Wyckoff's questionnaire of factors of failure (2003) and innovation questionnaire (Feizi et al, 2013) with a Likert scale of 5 items was administered. In order to assess the reliability, a primary sample of 30 questionnaires were pre-tested and then by using the data obtained from the questionnaire Cronbach alpha was achieved by means of (SPSS 20) software. The reliability coefficient of the questionnaires for the research variables shows a high reliability for the questions. This is indicated in the following Table (1).

Table 1. Cronbach alpha.

Cronbach alpha	Number of questions	dimensions
0.750	Four questions	Poor management
0.700	Three questions	Innovation culture
0.840	Three questions	process
0.779	Four questions	strategy

0.740	Four questions	instruction
0.780	Four questions	Idea management system
0.794	Ten questions	innovation

According to Cronbach's alpha values of the questionnaire dimensions, the values of all dimensions are more than 0.7, therefore the questionnaire has high reliability. Content validity of the questionnaire was based on expert opinion and the necessary changes were made. Factor analysis and SPSS software were used to assess the validity. The results of Exploratory factorial analysis of the first-order structures of packaging showed that sampling adequacy requirements are catered for by reviewing the KMO, Bartlett statistics and the percentage of the explained variance of the questions is 69% and the Bartlett significance level is zero which shows a very good validity.

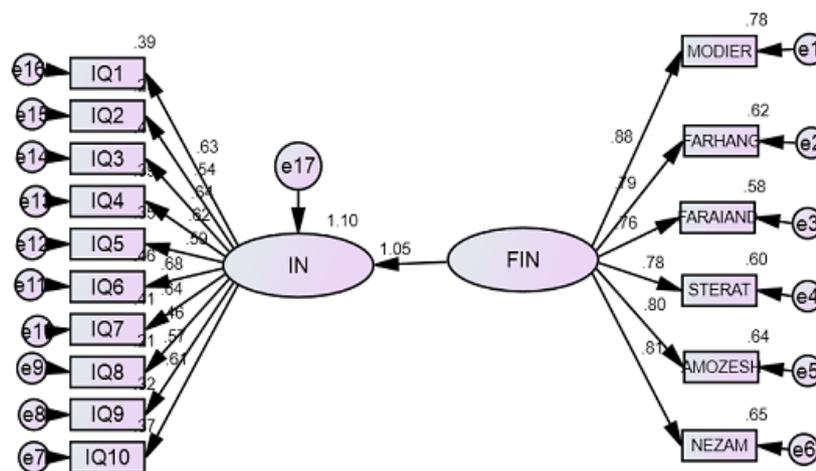
Data Analysis

The assessment of suitability of the proposed model was done through the structural equation modeling. To estimate the required analysis and to determine the impact of independent variable on the dependent variable (AMOS) statistical software was used.

Research Findings

Descriptive statistics of demographic variables showed that 84.8% of the participants were male and 15.2% were female. In terms of education 3.8% of the population had diploma, 31.4 % had associate degree, 55.2 % had bachelor and 9.6 % had a master degree and higher.

Research Model and Hypotheses



To test the research hypotheses, factorial analysis was done by AMOS software which is shown in the standard estimate mode (standardized coefficient β) in the following model. If the absolute value is a significant value, that is, if the path between the two variables is higher than 1.96; then, the relationship between the two variables are significant. Also the standard estimate coefficient (β) shows the degree to which variables effect on one another.

Table 2. Chi-Square value.

Chi-Square	df	χ^2/df	p-value	RMSEA
138	103	1.34	0.000	0.57

Table 3. Significant value between the variables and their C-R value are indicated.

	relationship		C.R.	P
innovation	<---	Poor management	0.946	***
innovation	<---	Innovation culture	3.087	***
innovation	<---	process	3.048	***
innovation	<---	strategy	5.058.	***
innovation	<---	instruction	7.724	***
innovation	<---	Idea management system	4.509	***

As is shown in Figure 2 and Table 3, there is a significant value between poor management and innovation (i.e. >1.96) which is significant at the level of 0.000 that is smaller than 0.05 (i.e. <0.05), therefore the first hypothesis is confirmed at the certainty level of 95%. In other words, one could claim that from the viewpoint of respondents, there is a significant relationship between poor management and failure of innovative activities. So the effect of poor management on the failure of innovative activities is confirmed.

A significant value is also found between lack of innovation culture and failure of innovative activities that is greater than 1.96 and is significant at the 0.0 level which is smaller than 0.05. Therefore the second hypothesis is also confirmed at the 95% of certainty. To put it another way, it can be claimed that from the respondents' standpoint there is a significant relationship between lack of innovation culture and failure in innovative activities.

The Results of the third hypothesis suggest that the significant value between lack of innovative processes and failure of innovative activities is greater than 96/1 and is significant at the level of zero ,that is, smaller than 0.05, therefore the third hypothesis is also confirmed at 95% certainty level.

Given the significant value between Lack of communication between projects and innovative designs with the business strategy in the failure of innovative activities and the P value it can be concluded that lack of communication between projects affects the failure of innovative activities. Significant values between lack of instruction and innovative activities are 7.724 which is greater than 1.96. So, it can be said that insufficient instruction affects the

failure of innovative activities. And finally regarding the sixth hypothesis, it can be said that given the C.R. value, lack of idea management system contributes to the failure of innovative activities. To fit the conceptual model to the estimated indices of the following table, it is evident that the target structural model has acceptable fit index. Therefore the obtained results from the estimation of the model are reliable.

Table 4. Results of estimation.

Fit index	Desirable value	Result
χ^2/df	3.00<	1.34
GFI (Goodness of Fit Index)	0.90>	0.92
RMSEA	0.08<	0.057
NFI(Normed Fit Index)	0.90>	0.91
NNFI(Non-Normed Fit Index)	>0.90	1.34

Results of estimation suggest the appropriateness of the model. The RMSEA value also equals to 0.057 which indicates a good fit. The lesser this value, the better fit is the model. GFI and AGFI indices are 0.92 and 0.91 respectively that are statistically appropriate and verify the general fit of the model. Also, the table of measurement models in the standard estimation mode and the effect of each of the variables or items show in the explanation of variance of the variable scores or the main factor. For the above structural model, the components can be compared with regard to their beta coefficient and assess their effect on the dependent variable, so that, components with larger beta coefficient have a greater impact on the dependent variable. Among the factors of failure, poor management with the Beta value of 0.88 had the greatest impact on the failure of business innovation in Sanandaj.

6. RESULTS AND DISCUSSIONS

As shown in this study, failure of an innovative activity can be the result of various factors and internal and external areas of the organization. Failure to designate one or two reasons suggests that innovators are better to note that many factors will occur simultaneously and will affect the life of a company. According to the statistical results presented in the section four, the six raised factors were confirmed in the sample studied businesses. Accordingly, as expected and consistent with previous research presented in the second section, the six proposed factors had a significant effect on lack of orientation to innovative activities or failure of innovative activities of small and medium businesses of the research. On the other hand, based on the data obtained from structural equation of effective factors in section 4, three factors of poor management, idea management system and instruction had the greatest role in the lack of orientation towards innovation or failure of innovation activities of small and medium surveyed businesses. However, cultural, strategy and process factors are at

the end of this ranking. Among the six recognized factors as causes of failure in innovation activities, many researchers including Wyckoff (2003) and Mohammadghasemi and Zivdar (2010), have identified lack of innovation culture as the most important factor in the failure of innovative activities. But in this study, based on the results of statistical analysis and structural equation, the most important factor influencing the failure of innovative activities is poor management.

7. CONCLUSIONS

Based on the results of the research the following suggestions are recommended:

1. The ability of managers in division of labor and grouping activities that results in improvements in the company's innovation activities.
2. Supportive and free atmosphere for communication between managers and staffs will lead to improvement in the performance of company's activities.
3. Knowing the market and the market-driven capabilities in developing innovation strengthens the innovation activities of the Companies.
4. Seizing opportunities and external threats such as competitors' changes in price and raw material sanctions by managers in the organization leads to the improvement the innovative activities of the organization.
5. Innovation teams are different from the usual project teams. They need distinct tools and intellectual frameworks. Therefore, it is necessary that staffs are given adequate training in this regard and are guided effectively during activities. This possibly promotes staffs' success in innovations teams.
6. Design a mechanism to improve organizing, prioritization and selection of appropriate ideas has always been a necessity. Such a mechanism should guarantee the measurement, evaluation, assessment of capabilities and the appropriateness of ideas, based on the determined and dynamic guiding indices and criteria. On one hand, in a healthy context for innovation this project can be a rational tool to evaluate ideas, and on the other hand, this will form the basis of effective ideas and is considered consistent with the business strategy.

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